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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------|------------------|
| 09/764,804  | 01/17/2001  | Sung-Ho Choi         | 678-594 (P9711)         | 7731             |
| 7590 05/14/2004  Dilworth & Barress, LLP 333 Earle Ovington Blvd. |             |                      | EXAMINER                |                  |
|   |             |                      | CANGIALOSI, SALVATORE A |                  |
| Uniondale, NY 11553   |             |                      | ART UNIT                | PAPER NUMBER     |
|   |             |                      | 2661                    | ~ <u>1</u>       |
|   |             |                      | DATE MAILED: 05/14/2004 | 1                |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s)   |  |  |  |  |
|---|---|--|--|--|--|--|
| Office Action Symmony   | 09/764,804  | CHOI ET AL.  |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit   |  |  |  |  |
| The MAN INO DATE of the   | Salvatore Cangialosi  | 2661   |  |  |  |  |
| The MAILING DATE of this communication apperiod for Reply   | pears on the cover sheet with the o   | correspondence address   |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.  after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine  earned patent term adjustment. See 37 CFR 1.704(b). | 136(a). In no event, however, may a reply be tir<br>ly within the statutory minimum of thirty (30) day<br>will apply and will expire SIX (6) MONTHS from<br>e, cause the application to become ABANDONE           | mely filed  ys will be considered timely.  the mailing date of this communication.  ED (35 U.S.C. 6 133) |  |  |  |  |
| Status  |   |  |  |  |  |  |
| 1) Responsive to communication(s) filed on 08 J   | anuary 2002.  |  |  |  |  |  |
|   |   |  |  |  |  |  |
|   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. |  |  |  |  |  |
| Disposition of Claims   |   |  |  |  |  |  |
| <ul> <li>4)  Claim(s) 1-15 is/are pending in the application 4a) Of the above claim(s) is/are withdra</li> <li>5)  Claim(s) 1-8 is/are allowed.</li> <li>6)  Claim(s) 9,10 and 13-15 is/are rejected.</li> <li>7)  Claim(s) 11 and 12 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or</li> </ul>  | wn from consideration.  |  |  |  |  |  |
| Application Papers  |   |  |  |  |  |  |
| 9)☐ The specification is objected to by the Examine   | er.   | •  |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |   |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |  |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Burea * See the attached detailed Office action for a list   | ts have been received.<br>ts have been received in Applicati<br>rity documents have been receive<br>u (PCT Rule 17.2(a)).   | ion No ed in this National Stage   |  |  |  |  |
| Attachment(s)   |   |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)   |   |  |  |  |  |  |
| <ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date 6.</li> </ul>   | Paper No(s)/Mail D  |  |  |  |  |  |

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1. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

2. Claims 9, 10, 13-15 are rejected under 35 U.S.C. § 103 as being unpatentable over Okawa et al in view of Gilhousen (both cited by applicant).

Regarding claim 9, Okawa et al (See pages 618-622) disclose a method for assigning OVSF orthogonal multicode tree codes having different information rate some much higher than others the tree structure having parent child properties (See Fig. 3 page 619) substantially as claimed. It is noted that that a spreading system must include both data and control signals. The differences between the above and the claimed invention are the specific control channel. Gilhousen (See Col. 4, line 60) shows explicit control messages. It is further noted that control messages are usually smaller and slower than data. It would have

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been obvious to the person having ordinary skill in this art to provide a similar arrangement Okawa et al because they are well known and conventional functional equivalents of spreading sequences in the prior art. Regarding the node allocation limitations of claim 10, Okawa et al (See Fig. 3 page 619) show the C type tree structure which is the functional equivalents of the claim. Regarding claim 13, Okawa et al (See pages 618-622) disclose a method for assigning OVSF orthogonal multicode tree codes having different information rate some much higher than others the tree structure having parent child properties (See Fig. 3 page 619) substantially as claimed. It is noted that that a spreading system must include both data and control signals. The differences between the above and the claimed invention are the specific control channel. Gilhousen (See Col. 4, line 60) shows explicit control messages. It is further noted that control messages are usually smaller and slower than data and it would be obvious to employ the slower channel for control. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement Okawa et al because they are well known and conventional functional equivalents of spreading sequences in the prior art. Regarding claim 14, Okawa et al (See pages 618-622) disclose a means for assigning OVSF orthogonal multicode tree codes having different information rate some much higher than others the tree structure having parent child properties (See Fig. 3 page 619) substantially as claimed. It is

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noted that that a spreading system must include both data and control signals and a memory means. The differences between the above and the claimed invention are the specific control channel. Gilhousen (See Col. 4, line 60) shows explicit control messages. It is further noted that control messages are usually smaller and slower than data. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement Okawa et al because they are well known and conventional functional equivalents of spreading sequences in the prior art. Regarding claim 15, Okawa et al (See pages 618-622) disclose a means for assigning OVSF orthogonal multicode tree codes having different information rate some much higher than others the tree structure having parent child properties (See Fig. 3 page 619) substantially as claimed. It is noted that that a spreading system must include both data and control signals and a memory means. The differences between the above and the claimed invention are the specific control channel. Gilhousen (See Col. 4, line 60) shows explicit control messages. It is further noted that control messages are usually smaller and slower than data. It would have been obvious to the person having ordinary skill in this art to provide a similar arrangement Okawa et al because they are well known and conventional functional equivalents of spreading sequences in the prior art.

Claims 11 and 12 are objected to as being dependent on rejected claims. It is also noted that claims 1-8 should be a

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single sentence with the formulas included with the body of the claims which is typical of most patents.

Any inquiry concerning this communication should be directed to Salvatore Cangialosi at telephone number (703) 305-1837. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms, can be reached at (703) 305-4703.

## Any response to this action should be mailed to:

Commissioner of Patent and Trademarks
Washington, D.C. 20231

## or faxed to (703)872-9306

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, Virginia, Sixth Floor(Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

ÁLVATORE CANGIALOSI PRIMARY EXAMINER ART UNIT 222